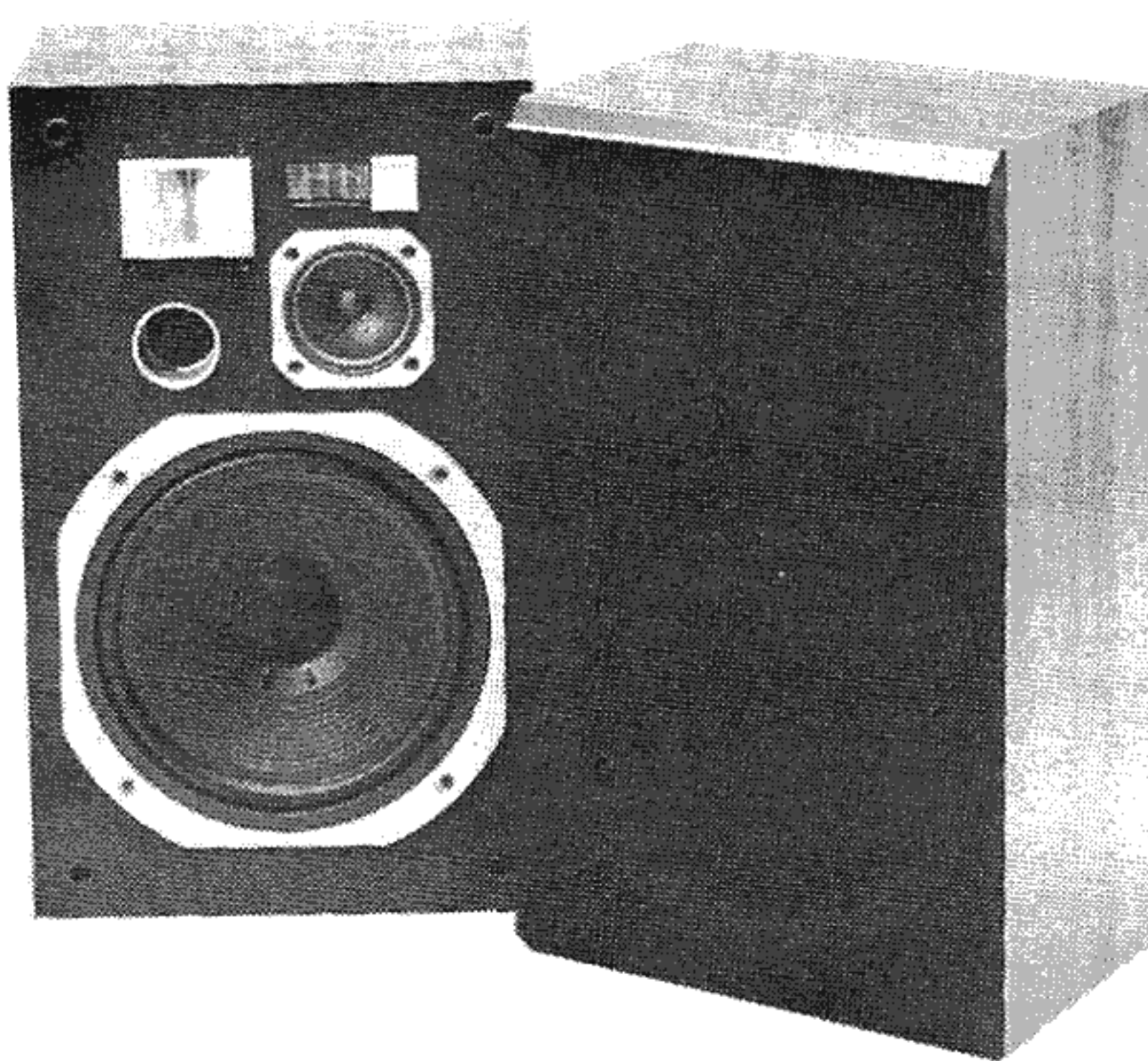


# Service Manual



The model shown in this photo is CS-403.

**ORDER NO.  
ART-690-0**

## SPEAKER SYSTEM

# CS-403 / E, XC

# CS-303 / E, XC

# CS-203 / E, XC

## SPECIFICATIONS

### NOTE:

Specifications and design subject to possible modification without notice due to improvements.

### CS-403

Enclosure . . . . . Book-shelf style, Bass-reflex type  
System . . . . . 3-way, 3-speakers system  
Speakers  
Woofer . . . . . 30cm (12in) cone type  
Mid range . . . . . 10cm (4in) cone type  
Tweeter . . . . . Horn-loaded Ribon type  
Impedance . . . . . 8 ohms  
Frequency range . . . . . 40 to 40,000Hz  
Sensitivity . . . . . 93dB/W (at 1-meter distance)  
Maximum Input Power . . . . . 80W  
Nominal Input Power . . . . . 40W  
Recommended Amplifier Power . . . . . 10 to 100W  
Crossover Frequency . . . . . 2kHz, 4kHz  
Weight . . . . . 12kg (26lb 7oz)  
Dimensions . . . . . 380(W) x 630(H) x 263(D)mm  
14-31/32(W) x 24-13/16(H) x 10-11/32(D)in  
Accessory Parts . . . . . Speaker cords x 1  
Operating guide x 1

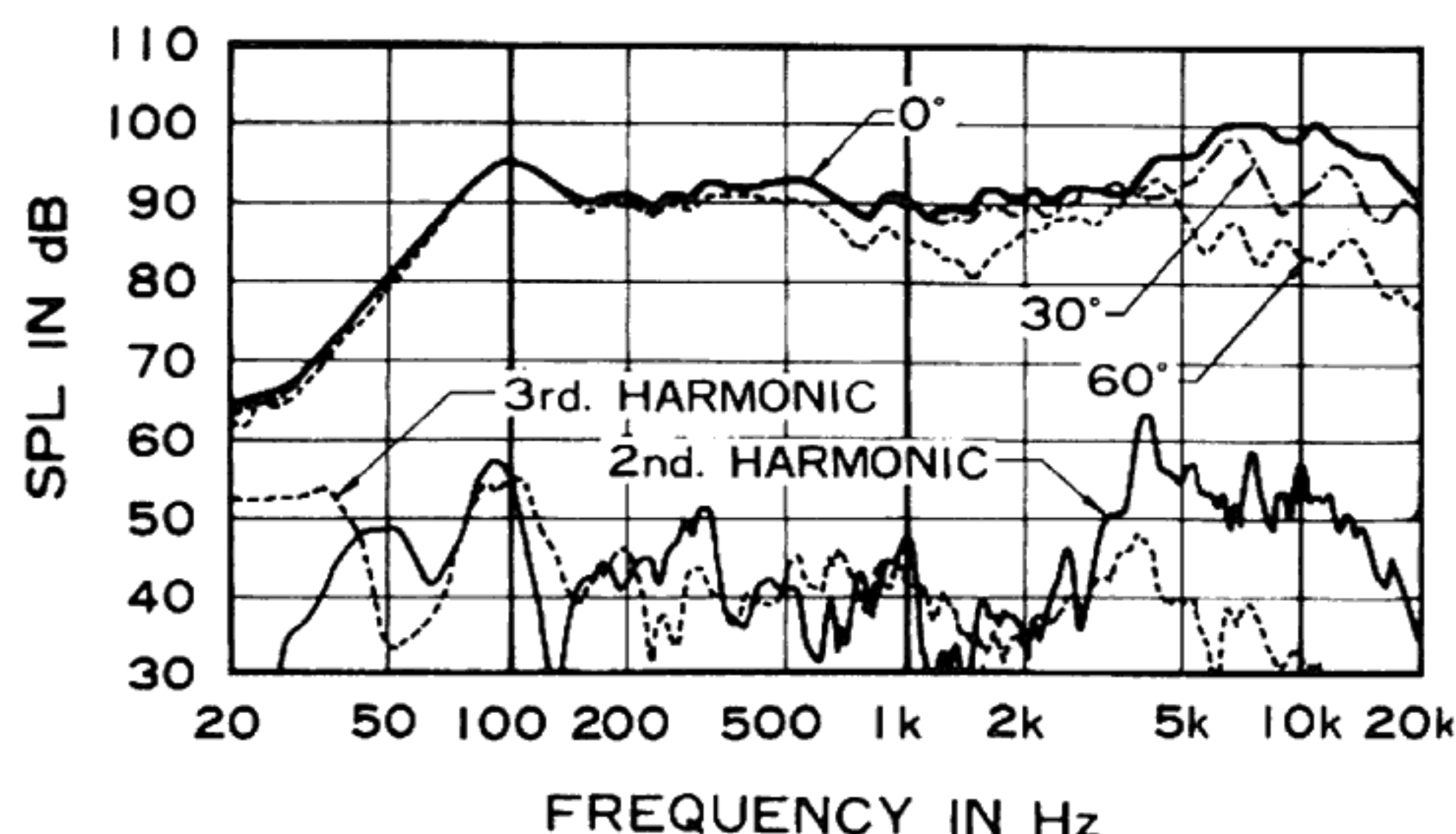
### CS-303

Enclosure . . . . . Book-shelf style, Bass-reflex type  
System . . . . . 3-way, 3-speakers system  
Speakers  
Woofer . . . . . 25cm (9-7/8in) cone type  
Mid range . . . . . 6.6cm (2-5/8in) cone type  
Tweeter . . . . . Horn-loaded Ribon type  
Impedance . . . . . 8 ohms  
Frequency range . . . . . 45 to 40,000Hz  
Sensitivity . . . . . 92dB/W (at 1-meter distance)  
Maximum Input Power . . . . . 60W  
Nominal Input Power . . . . . 30W  
Recommended Amplifier Power . . . . . 10 to 80W  
Crossover Frequency . . . . . 4kHz, 6kHz  
Weight . . . . . 8.5kg (18lb 12oz)  
Dimensions . . . . . 335(W) x 555(H) x 248(D)mm  
13-3/16(W) x 21-27/32(H) x 9-3/4(D)in  
Accessory Parts . . . . . Speaker cords x 1  
Operating guide x 1

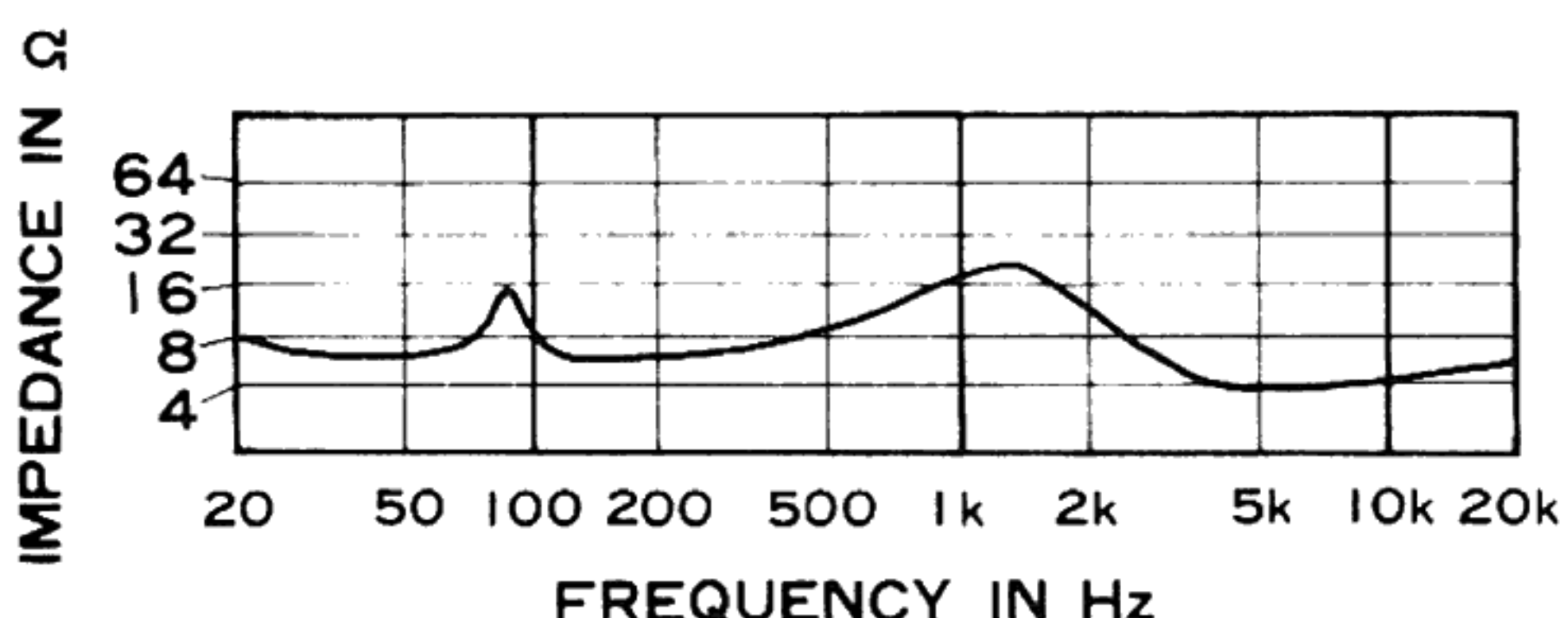
### CS-203

Enclosure . . . . . Book-shelf style, Bass-reflex type  
System . . . . . 3-way 3-speakers system  
Speakers  
Woofer . . . . . 20cm (7-7/8in) cone type  
Mid range . . . . . 6.6cm (2-5/8in) cone type  
Tweeter . . . . . 5.2cm (2-1/16in) cone type  
Impedance . . . . . 8 ohms  
Frequency range . . . . . 50 to 20,000Hz  
Sensitivity . . . . . 91dB/W (at 1-meter distance)  
Maximum Input Power . . . . . 40W  
Nominal Input Power . . . . . 20W  
Recommended Amplifier Power . . . . . 10 to 60W  
Crossover Frequency . . . . . 4.5kHz, 6kHz  
Weight . . . . . 6kg (13lb 3oz)  
Dimensions . . . . . 300(W) x 500(H) x 215(D)mm  
11-13/16(W) x 19-11/16(H) x 8-15/32(D)in  
Accessory Parts . . . . . Speaker cords x 1  
Operating guide x 1

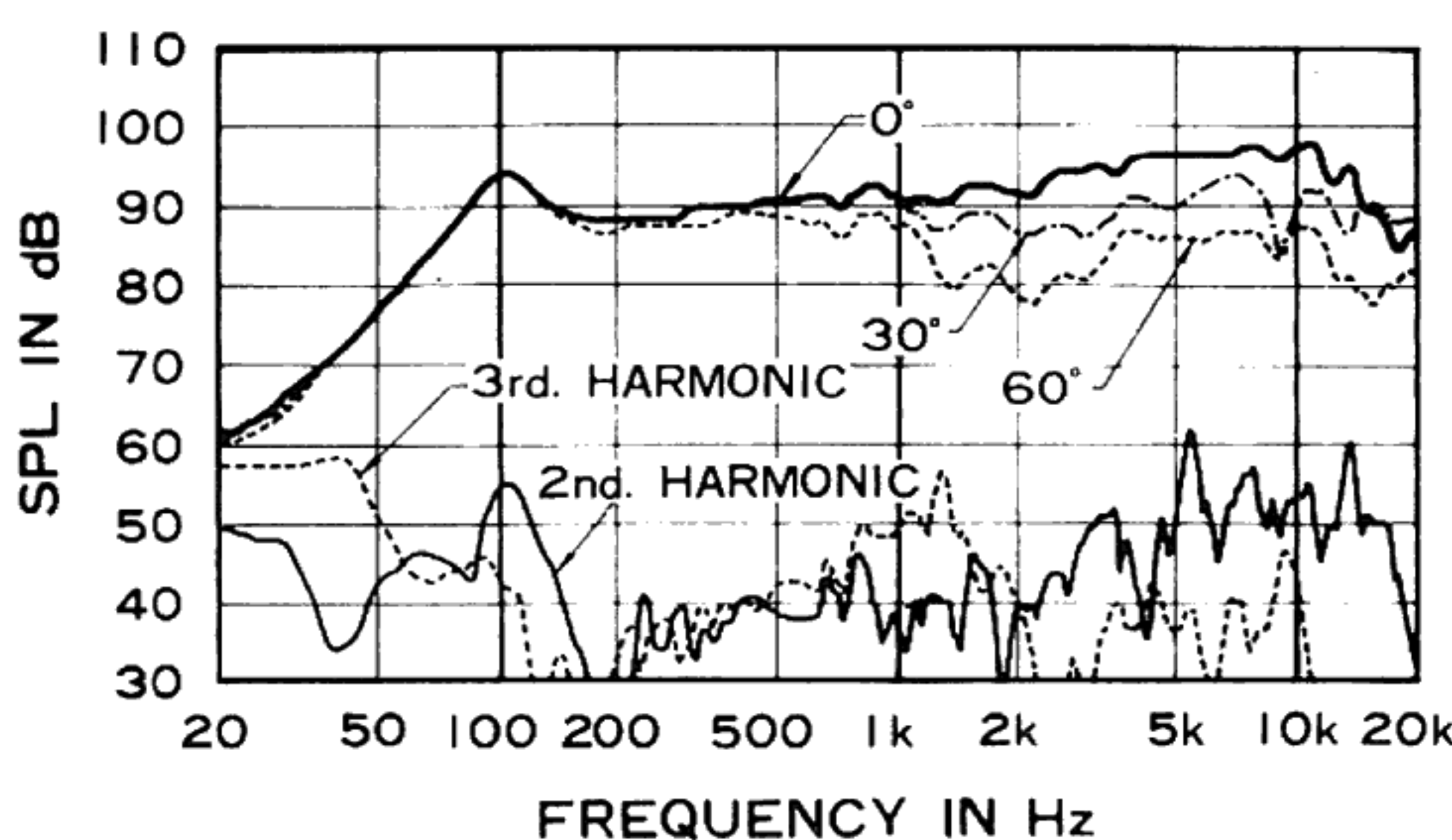
### FREQUENCY RESPONSE & HARMONIC DISTORTION



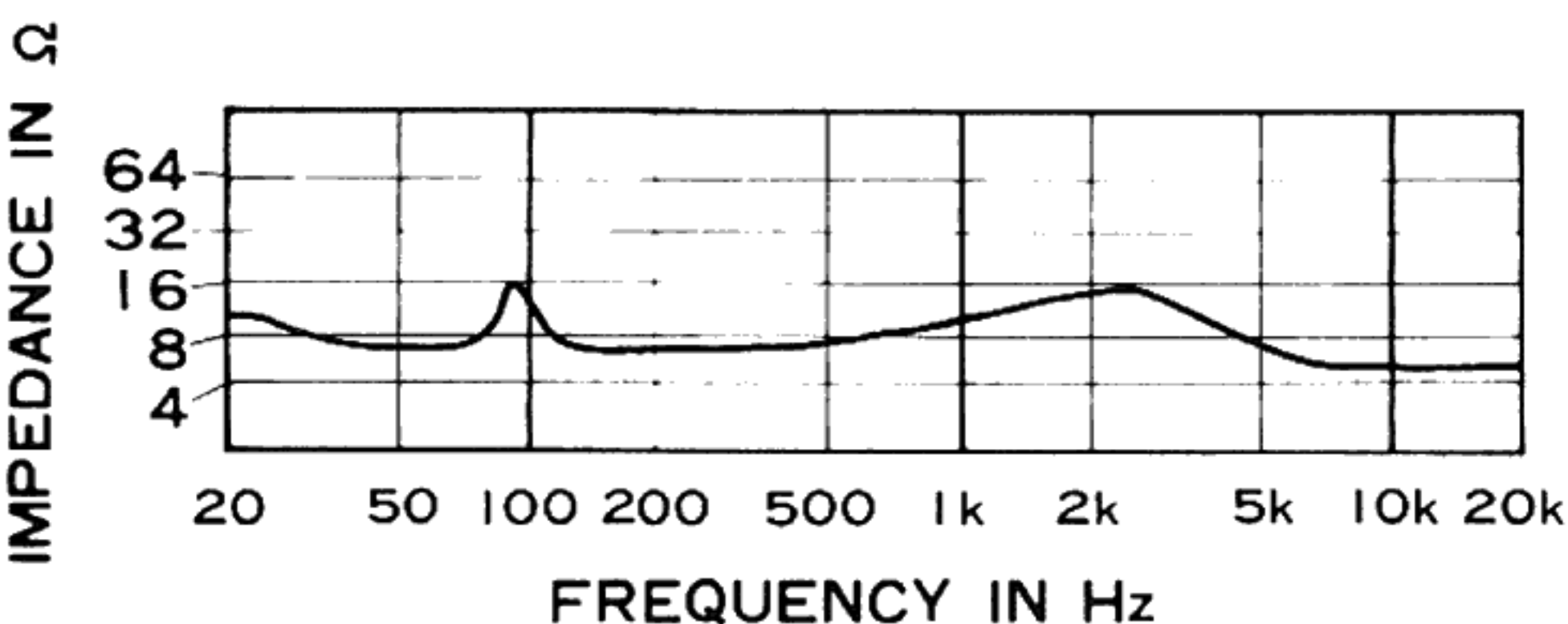
### IMPEDANCE



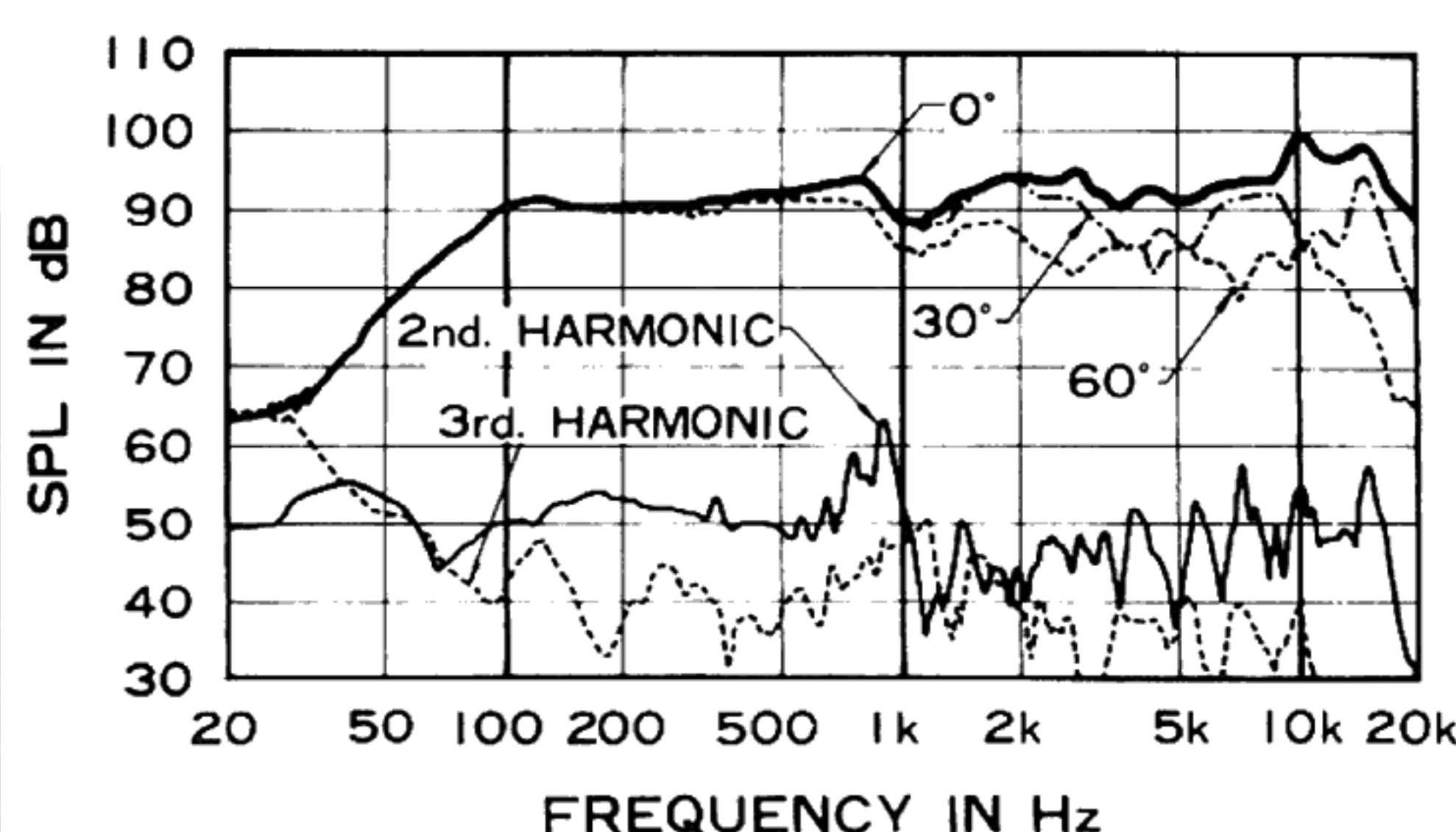
### FREQUENCY RESPONSE & HARMONIC DISTORTION



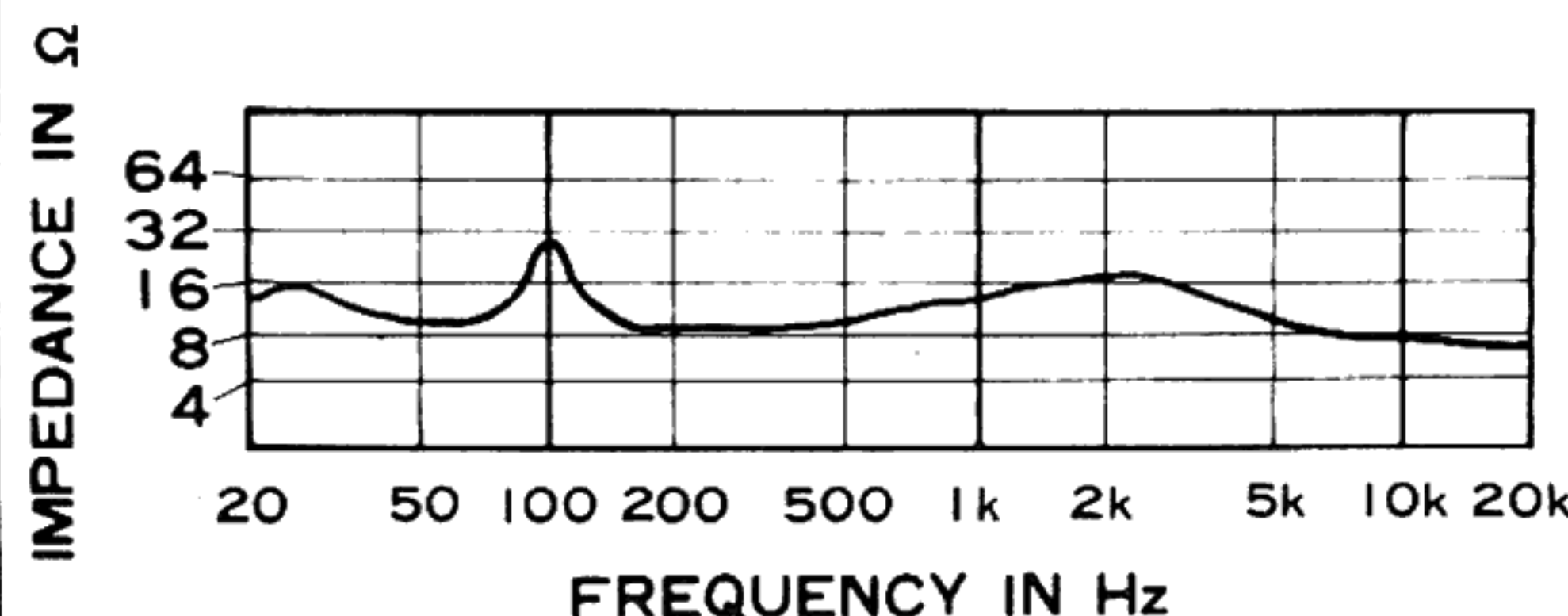
### IMPEDANCE



### FREQUENCY RESPONSE & HARMONIC DISTORTION



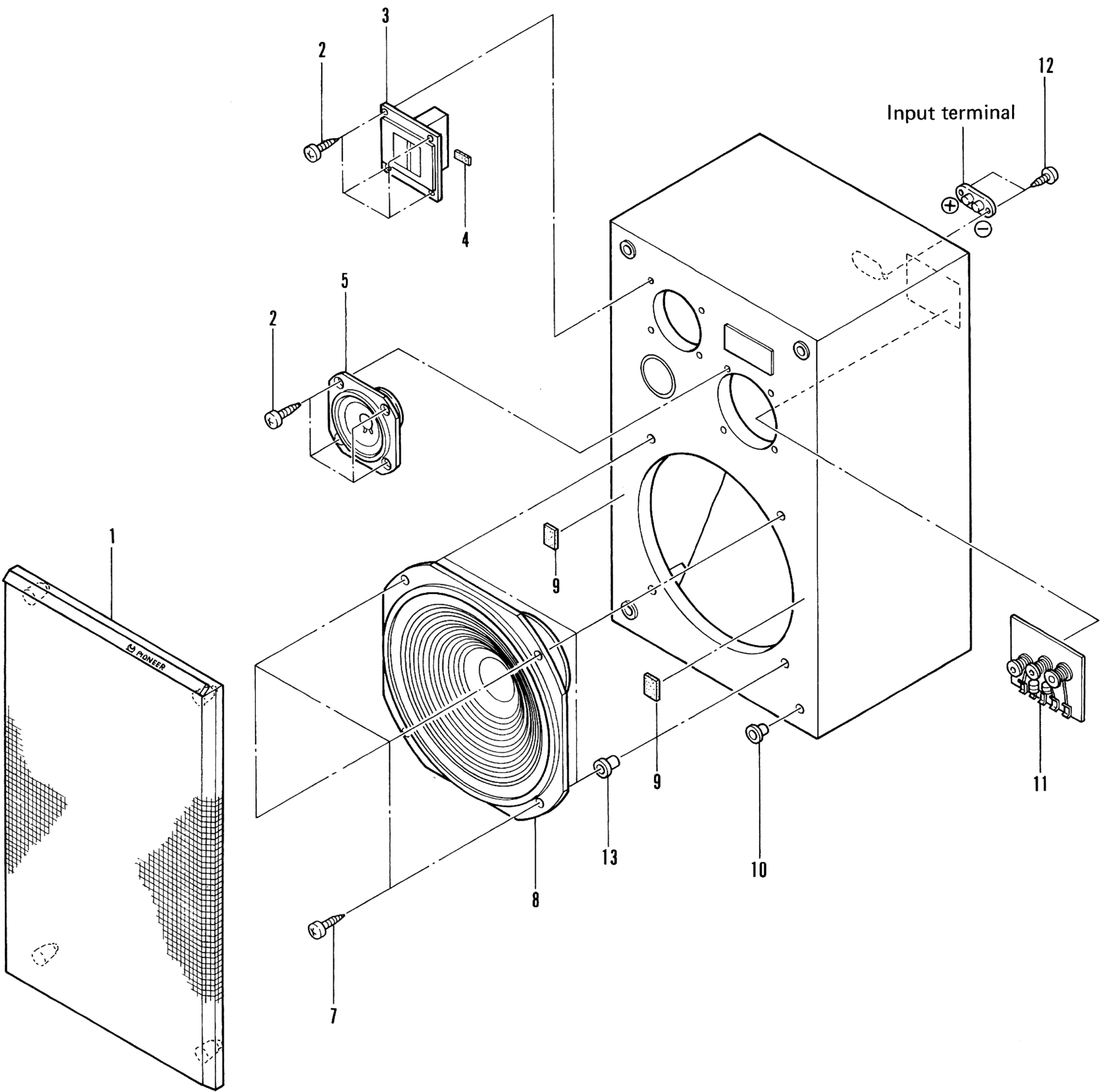
### IMPEDANCE





# EXPLODED VIEW AND PARTS LIST

## Exploded View



NOTES:

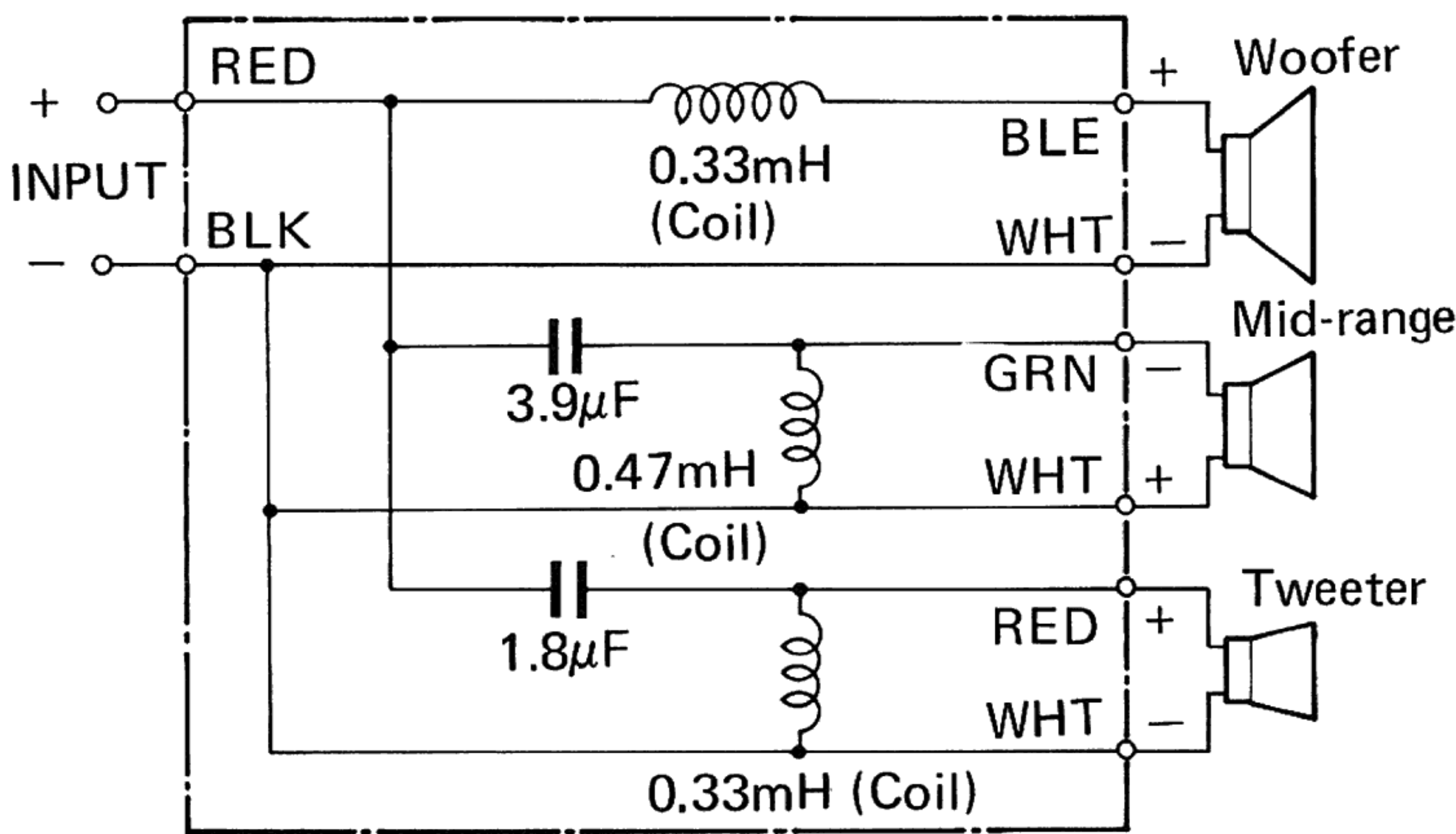
- Parts without part number cannot be supplied.
  - For your Parts Stock Control, the fast moving items are indicated with the symbols ★★ and ★.
  - ★★ *GENERALLY MOVES FASTER THAN ★.*
- This classification shall be adjusted by each distributor because it depends on model No., temperature, humidity, etc.

Parts List

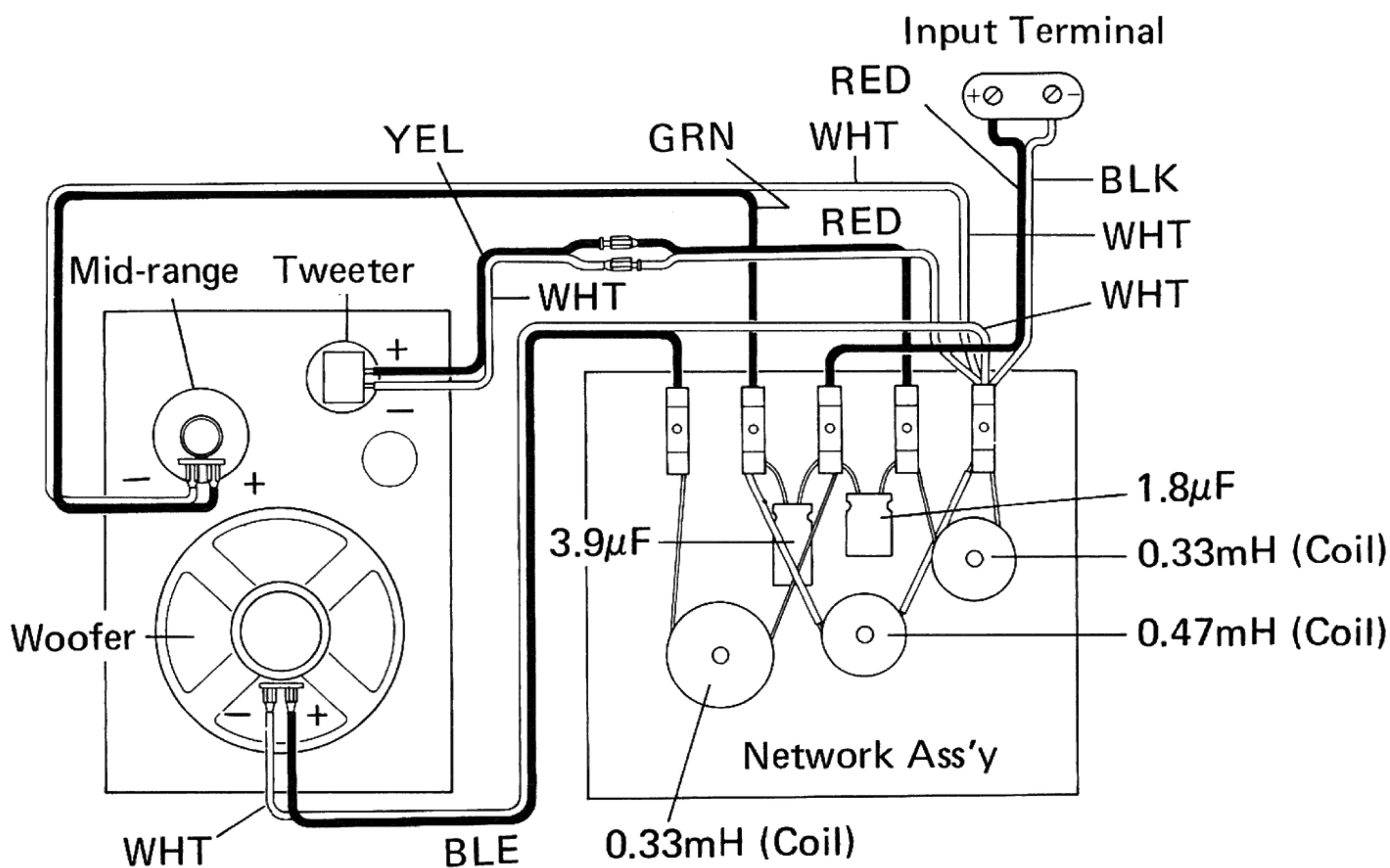
Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
	1.	SMG-245	Grill		11.	SWN-289	Network assembly
	2.	BYC40P200FZK	Screw		12.	RWC31P130FZK	Screw
★★	3.	PT-R01A	Tweeter		13.	SNK-538	Spacer
	4.	SEC-401	Packing				
★★	5.	10-737A	Mid-Range				
	6.	.....					
	7.	BYC50P250FZK	Screw				
★★	8.	30-761A	Woofers				
	9.	SEC-443	Packing				
	10.	SNK-592	Catch				

NETWORK ASSEMBLY (SWN-289)

■ Circuit Diagram



■ Wiring



CS-403

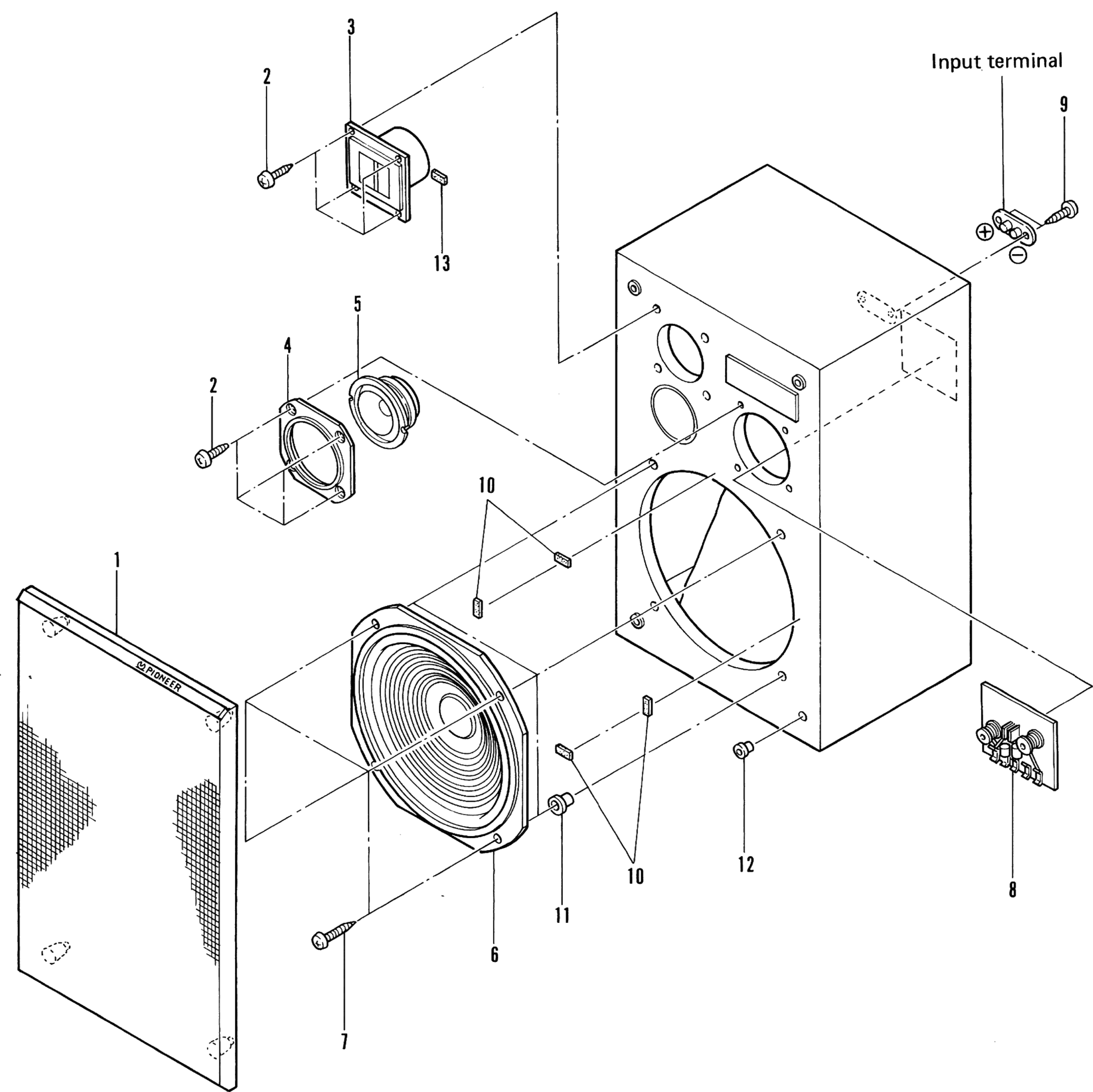
■ Parts List

Mark	Part No.	Symbol & Description
	CES04 3R9K 63	Capacitor
	CES04 1R8K 63	Capacitor
	KKA-002	Input terminal



# EXPLODED VIEW AND PARTS LIST

## Exploded View



NOTES:

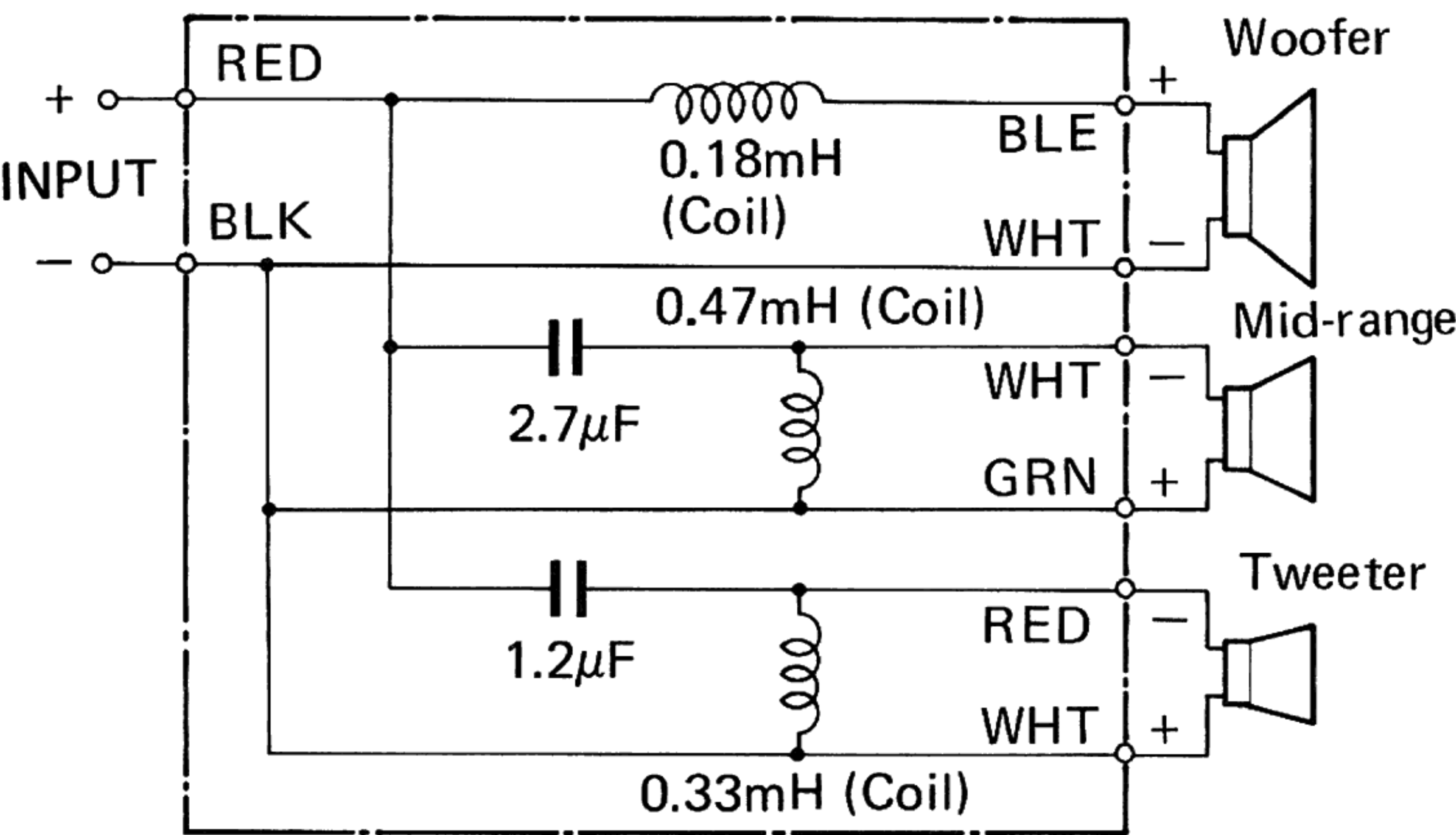
- Parts without part number cannot be supplied.
- For your Parts Stock Control, the fast moving items are indicated with the symbols **★★** and **★**.  
**★★** *GENERALLY MOVES FASTER THAN ★.*  
This classification shall be adjusted by each distributor because it depends on model No., temperature, humidity, etc.

Parts List

Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
	1.	SMG-246	Grill		11.	SNK-538	Spacer
	2.	BYC40P200FZK	Screw		12.	SNK-592	Catch
★★	3.	PT-R01A	Tweeter		13.	SEC-401	Packing
	4.	SNK-618	Flange				
★★	5.	D66AP45-12F-Q	Mid-range				
★★	6.	25-755A	Woofer				
	7.	BYC50P250FZK	Screw				
	8.	SWN-290	Network assembly				
	9.	RWC31P130FZK	Screw				
	10.	SEC-443	Packing				

NETWORK ASSEMBLY (SWN-290)

■ Circuit Diagram

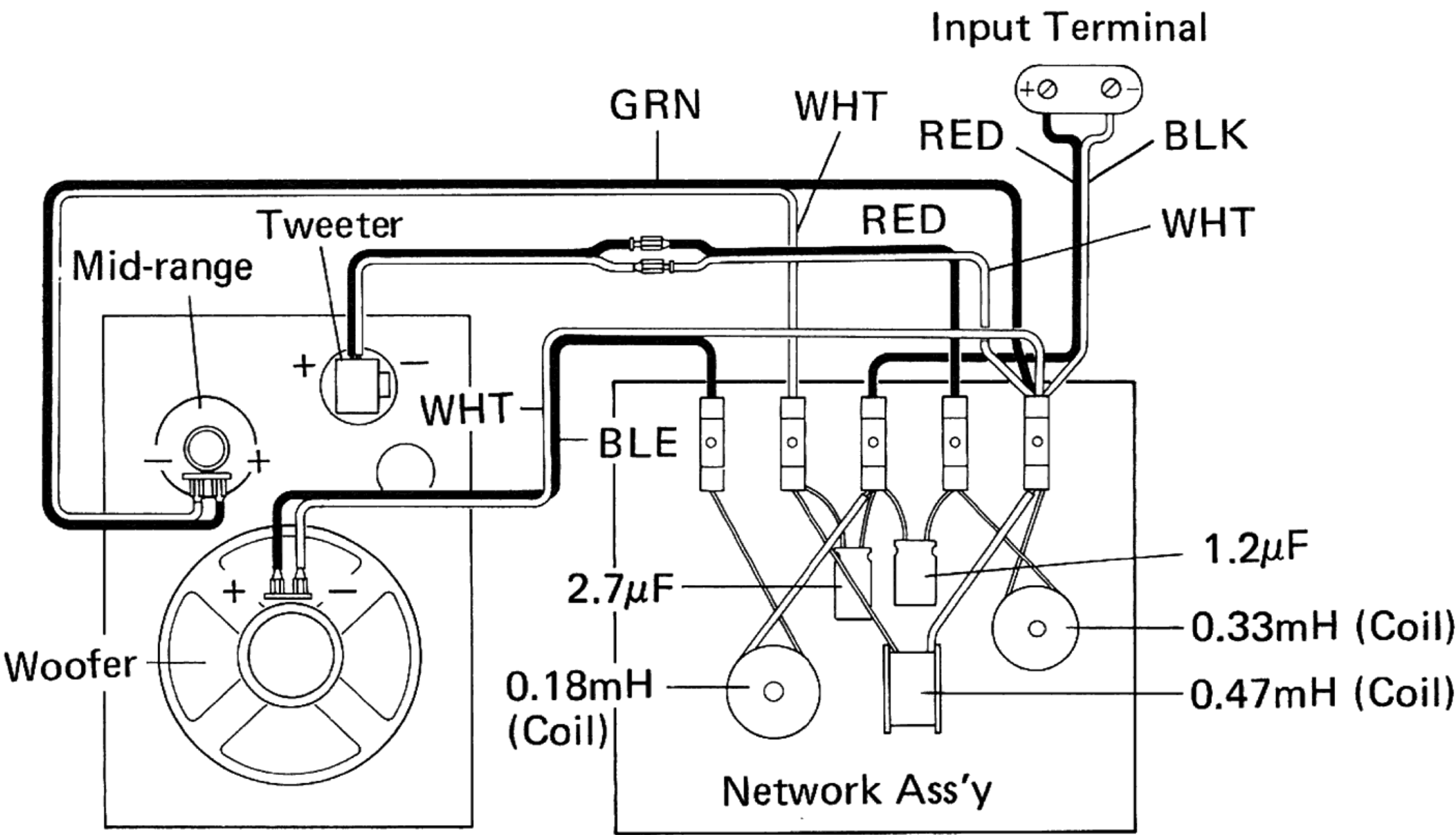


CS-303

■ Parts List

Mark	Part No.	Symbol & Description
	CES04 2R7K 63	Capacitor
	CES04 1R2K 63	Capacitor
	KKA-002	Input terminal

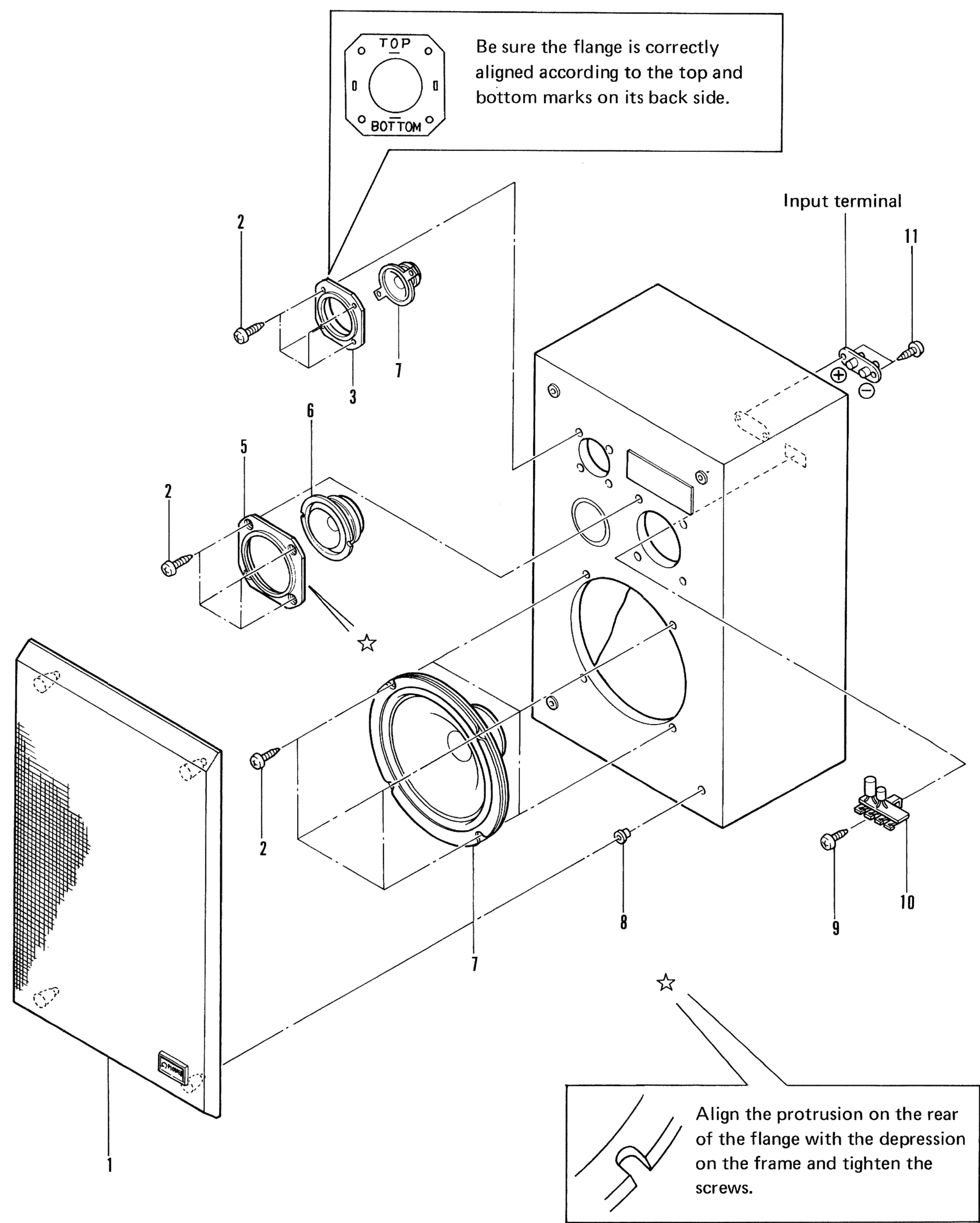
■ Wiring





# EXPLODED VIEW AND PARTS LIST

## Exploded View



NOTES:

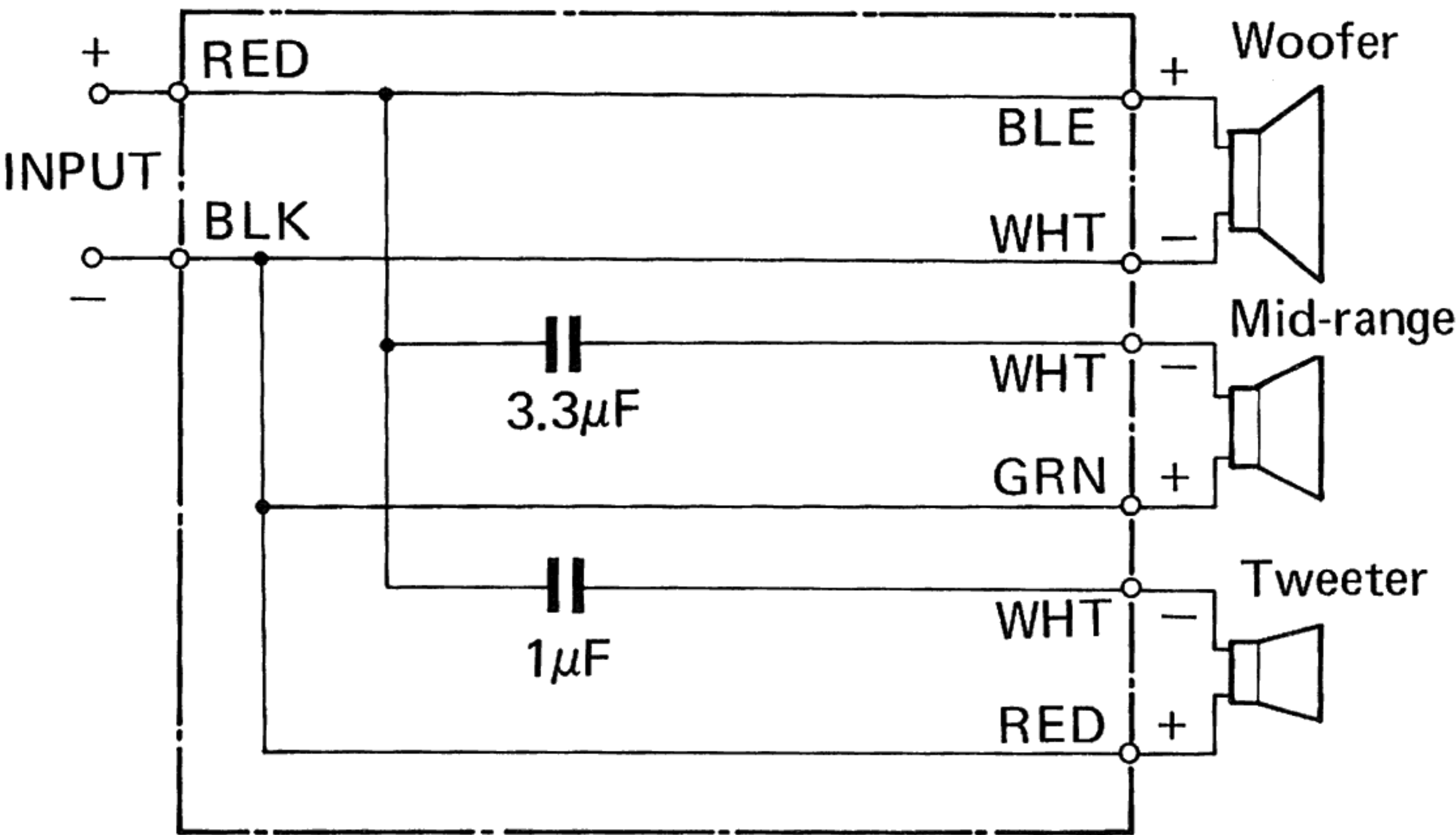
- Parts without part number cannot be supplied.
- For your Parts Stock Control, the fast moving items are indicated with the symbols **★★** and **★**.  
**★★ GENERALLY MOVES FASTER THAN ★.**  
This classification shall be adjusted by each distributor because it depends on model No., temperature, humidity, etc.

Parts List

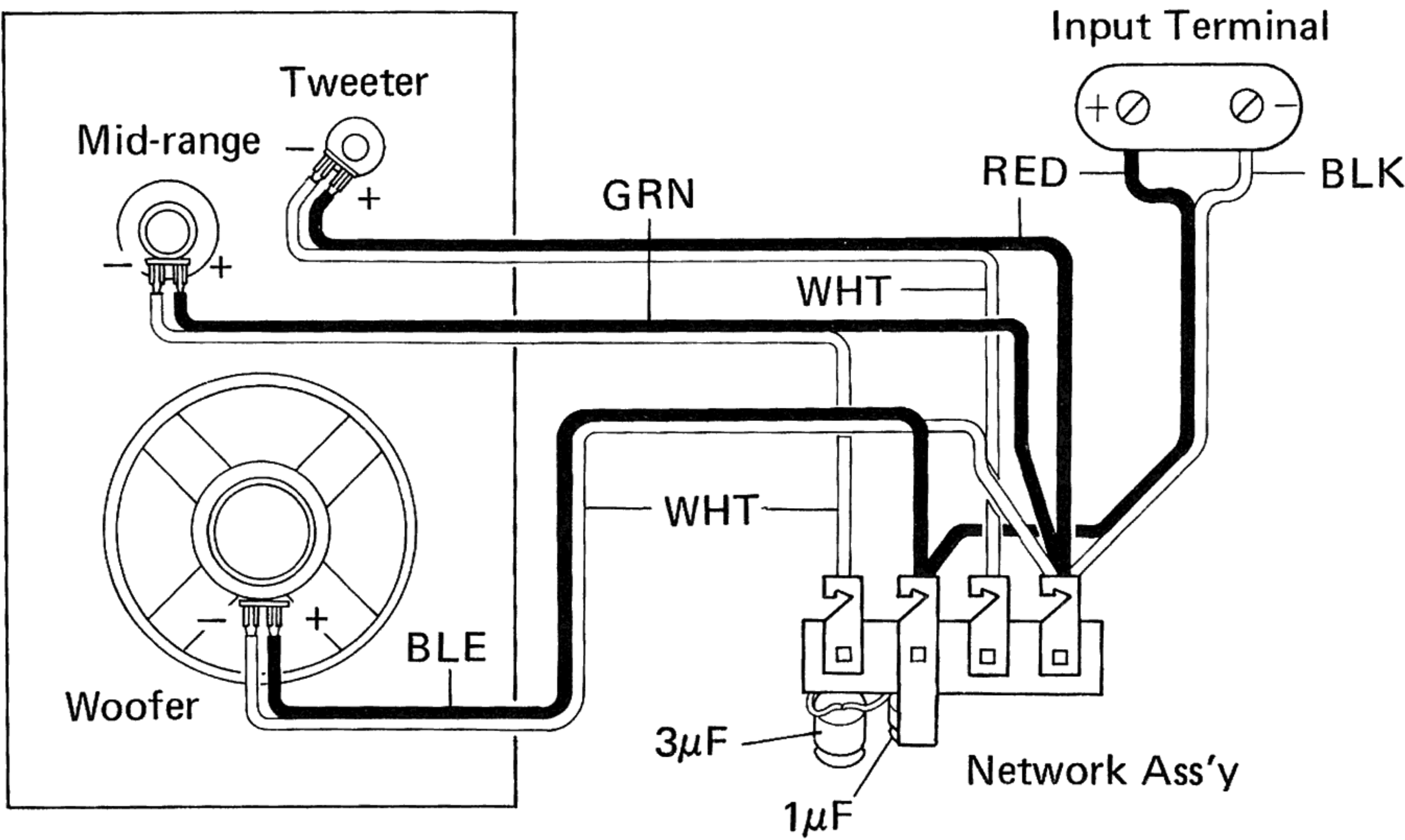
Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
	1.	SMG-247	Grill		11.	RWC31P100FZK	Screw
	2.	BYC40P160FZK	Screw				
	3.	SNK-619	Flange				
★★	4.	B20EC70-12F-Q	Woofers				
	5.	SNK-618	Flange				
★★	6.	D66AP45-12F-Q	Mid-range				
★★	7.	A52AP13-06F-Q	Tweeter				
	8.	SNK-592	Catch				
	9.	RWC31P63FMC	Screw				
	10.	SWN-291	Network assembly				

NETWORK ASSEMBLY (SWN-291)

■ Circuit Diagram



■ Wiring



CS-203

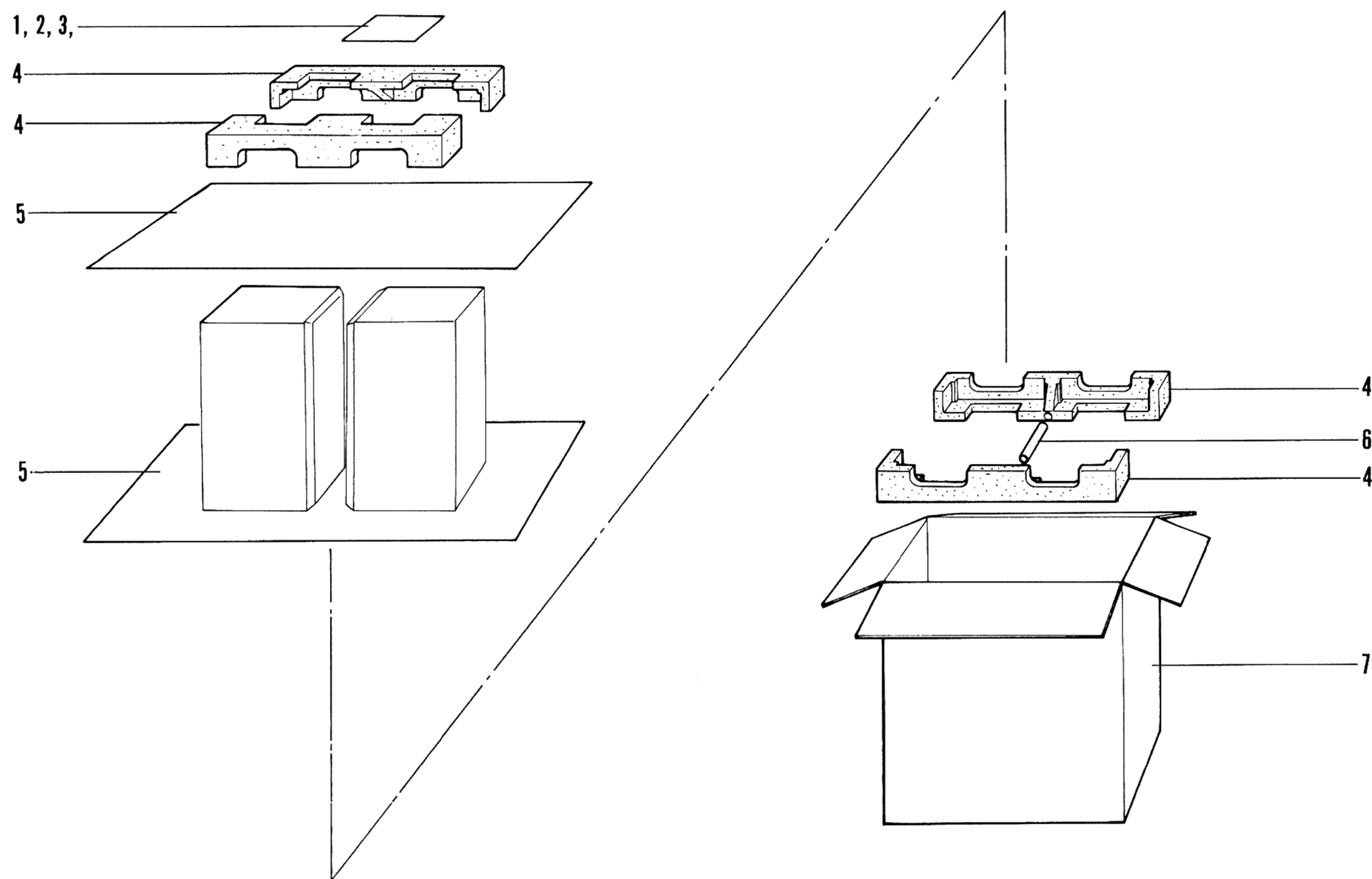
■ Parts List

Mark	Part No.	Symbol & Description
	CES04 3R0K 63	Capacitor
	CES04 1R0K 63	Capacitor
	KKA-002	Input terminal



# PACKING VIEW AND PARTS LIST

## Packing View



### Parts List (CS-403)

Mark	No.	Part No.	Description
	1.	SHL-185	Vinyl bag
	2.	KDD-012	Service cord
	3.	SRB-272	Operating guide (English)
		SRD-016	Operating guide (English/German/French/Italian)
	4.	SHA-492	Corner pad
	5.	SHC-357	Protection mat
	6.		Joint pipe
	7.	SHG-478	Packing case (E model)
		SHG-508	Packing case (XC model)

### Parts List (CS-203)

Mark	No.	Part No.	Description
	1.	SHL-185	Vinyl bag
	2.	KDD-012	Service cord
	3.	SRB-274	Operating guide (English)
		SRD-017	Operating guide (English/German/French/Italian)
	4.	SHA-493	Corner pad
	5.	SHC-359	Protection mat
	6.		Joint pipe
	7.	SHG-480	Packing case (E model)
		SHG-510	Packing case (XC model)

### Parts List (CS-303)

Mark	No.	Part No.	Description
	1.	SHL-185	Vinyl bag
	2.	KDD-012	Service cord
	3.	SRB-273	Operating guide (English)
		SRD-018	Operating guide (English/German/French/Italian)
	4.	SHA-532	Corner pad
	5.	SHC-358	Protection mat
	6.		Joint pipe
	7.	SHG-479	Packing case (E model)
		SHG-509	Packing case (XC model)